

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference PETR/RR/6859	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 02/14792	International filing date (day/month/year) 30.12.2002	Priority date (day/month/year) 08.01.2002
International Patent Classification (IPC) or both national classification and IPC F24F11/00		
Applicant RC GROUP S.P.A.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of 1 sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 07.07.2003	Date of completion of this report 13.04.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Lienhard, D Telephone No. +49 89 2399-2676 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 02/14792**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-7 as originally filed

Claims, Numbers

2-8 as originally filed

1 received on 08.12.2003 with letter of 05.12.2003

Drawings, Sheets

1/7-7/7 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-6,8
	No: Claims	7
Inventive step (IS)	Yes: Claims	1-6,7
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-8
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- 1). Claim 1 relates to a regulation of displacement conditioners for maintaining the thermal gradient in the room to be conditioned equal or higher to a design value as a function of the power required or load required, said method comprising regulation of the power supplied by the conditioner and characterised in that it also comprises combined regulation of the air flow rate supplied by the conditioner.

US-A-5 791 983 discloses a displacement ventilation method whereby the power supplied by the conditioner and the air flow rate supplied by the conditioner are dependent on the air quality sensed in the room. The method disclosed in that document is not suitable without modifications for maintaining the thermal gradient in the room to be conditioned equal or higher than the design value.

US-A-5857906 and GB-A-2 251681 are not related to displacement conditioner, i.e. to conditioner supplying cold air at low speed at floor level, and thus the method disclosed in that document is also not suitable without modifications for maintaining the thermal gradient in the room to be conditioned equal or higher than the design value.

US-A-4903894 discloses a displacement ventilation method for maintaining the thermal gradient in the room to be conditioned equal or higher than the design value (see claim 8) whereby the air flow rates supplied by the ventilator is regulated in function of the thermal gradient. However, this document does not disclose a conditioner, i.e. the air is merely ventilated and not conditioned. Thus, the step of regulation of the power supplied by the conditioner is missing in that document.

Therefore, the method claim 1 is considered to be new and to involve an inventive activity.

- 2). The apparatus claim 7 is not new.

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The US-A-5791983 discloses a ventilation conditioning system comprising combined regulation of the power supplied by the conditioner (the controller 74 controls the heating coils 65 and thus modify the temperature of the cool primary air) and of the air flow rate supplied by the conditioner (regulation of the fan 76). Thus, claim 7 is not new.

Furthermore, US-A-5 857 906 also discloses a ventilation conditioning system comprising combined regulation of the power supplied by the conditioner (the controller 116 controls the compressor driving unit 120 of the conditioner) and of the air flow rate supplied by the conditioner (the controller 116 controls the fan motor driving unit 128; see figure 3). Thus, claim 7 is not new.

- 2.1 In his letter dated 05.12.03, the applicant considered that claim 7 was a dependent claim of claim 1. However, such a dependence can not be found in the wording of the present claim 7.
- 3). Dependent claims 2 to 6 and also claim 8, which is clearly dependent on claim 1, also meet the requirements of Articles 33(2) and 33(3) PCT, because of their dependence on claim 1.

AMENDED CLAIM 1

1. Regulation method of displacement conditioners for maintaining the thermal gradient in the room be conditioned equal to or higher than the design value as a function of the power required or load required, said method comprising regulation of the power supplied by the conditioner, characterised in that it also comprises combined regulation of the air flow rate supplied by the conditioner.